AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1.   (Cancelled).

2.   (Currently Amended): The system as claimed in ~~claim 1,~~ claim 4, wherein the parameter of the sensor comprises a vehicle velocity.

3.   (Cancelled).

4.   (Currently Amended): ~~The system as claimed in claim 3, wherein~~ A system for controlling an automatic transmission for an internal combustion engine, the transmission comprising a gear shift mechanism to which motive force of the engine is transferred through a fluid coupling, the mechanism comprising first and second friction engaging elements, wherein a shifting from a first gear ratio to a second gear ratio is carried out by releasing a first hydraulic pressure of the first friction engaging element for disengagement thereof and supplying a second hydraulic pressure to the second friction engaging element for engagement thereof, the second hydraulic pressure being subjected to a feedback control, the system comprising:

a sensor that senses a parameter on a vehicle cruising condition; and

an electronic control unit (ECU) that is operative in response to the sensed parameter, the ECU comprising:

a first part that calculates, in accordance with the sensed parameter, a difference in output-side rotational speed of the fluid coupling before and after the shifting; and

a second part that sets, when the shifting is carried out with an output of the engine being smaller than a predetermined value, the second hydraulic pressure immediately before start of the feedback control in accordance with the calculated difference,

wherein the second hydraulic pressure has an initial value that is determined in accordance with torque acting on the output side of the fluid coupling immediately before start of the feedback control,

wherein the initial value is corrected in accordance with the calculated difference in output-side rotational speed, and

wherein the corrected initial value of the second hydraulic pressure ~~is greater in an area where~~ decreases with an increase in the calculated difference in output-side rotational speed ~~is smaller than in an area where the calculated difference is greater~~.

5.   (Currently Amended): The system as claimed in ~~claim 3,~~ claim 4, wherein the corrected initial value of the second hydraulic pressure is held substantially constant in an area where the calculated difference in output-side rotational speed is smaller than a predetermined value, whereas the corrected initial value is decreased with increasing the calculated difference in an area where the calculated difference is greater than the predetermined value.

6.   (Currently Amended): The system as claimed in ~~claim 3,~~ claim 4, wherein the ECU comprises a map set previously for correction of the initial value of the second hydraulic pressure.

7.   (Cancelled).

8.   (Currently Amended):   The automatic transmission as claimed in ~~claim 7,~~ claim 10, wherein the parameter of the sensor comprises a vehicle velocity.

9.   (Cancelled).

10.   (Currently Amended):   ~~The automatic transmission as claimed in claim 9, wherein~~ An automatic transmission for an internal combustion engine, comprising:

a fluid coupling;

a gear shift mechanism to which motive force of the engine is transferred through the fluid coupling, the mechanism comprising first and second friction engaging elements, wherein a shifting from a first gear ratio to a second gear ratio is carried out by releasing a first hydraulic pressure of the first friction engaging element for disengagement thereof and supplying a second hydraulic pressure to the second friction engaging element for engagement thereof, the second hydraulic pressure being subjected to a feedback control;

a sensor that senses a parameter on a vehicle cruising condition; and

an electronic control unit (ECU) that is operative in response to the sensed parameter, the ECU being programmed to:

calculate, in accordance with the sensed parameter, a difference in output-side rotational speed of the fluid coupling before and after the shifting; and

set, when the shifting is carried out with an output of the engine being smaller than a predetermined value, the second hydraulic pressure immediately before a start of the feedback control in accordance with the calculated difference,

wherein the second hydraulic pressure has an initial value that is determined in accordance with torque acting on the output side of the fluid coupling immediately before the start of the feedback control,

wherein the initial value is corrected in accordance with the calculated difference in output-side rotational speed, and

wherein the corrected initial value of the second hydraulic pressure ~~is greater in an area where~~ decreases with an increase in the calculated difference in output-side rotational speed ~~is smaller than in an area where the calculated difference is greater~~.

11.   (Currently Amended):   The automatic transmission as claimed in ~~claim 9,~~ claim 10, wherein the corrected initial value of the second hydraulic pressure is held substantially constant in an area where the calculated difference in output-side rotational speed is smaller than a predetermined value, whereas the corrected initial value is decreased with increasing the calculated difference in an area where the calculated difference is greater than the predetermined value.

12.   (Currently Amended):   The automatic transmission as claimed in ~~claim 9,~~ claim 10, wherein the ECU comprises a map set previously for correction of the initial value of the second hydraulic pressure.

13.   (Cancelled).

14.   (Currently Amended):   The method as claimed in ~~claim 13,~~ claim 16, wherein the parameter of the sensor comprises a vehicle velocity.

15.   (Cancelled).

16.   (Currently Amended):   ~~The method as claimed in claim 15, wherein~~ A method of controlling an automatic transmission for an internal combustion engine, the transmission comprising a gear shift mechanism to which motive force of the engine is transferred through a fluid coupling, the mechanism comprising first and second friction engaging elements, wherein a shifting from a first gear ratio to a second gear ratio is carried out by releasing a first hydraulic pressure of the first friction engaging element for disengagement thereof and supplying a second hydraulic pressure to the second friction engaging element for engagement thereof, the second hydraulic pressure being subjected to a feedback control, the method comprising the steps of:
          sensing a parameter on a vehicle cruising condition;
          calculating, in accordance with the sensed parameter, a difference in output-side
                rotational speed of the fluid coupling before and after the shifting; and
          setting, when the shifting is carried out with an output of the engine being smaller
                than a predetermined value, the second hydraulic pressure immediately before
                a start of the feedback control in accordance with the calculated difference,
          wherein the second hydraulic pressure has an initial value determined in accordance
with torque acting on the output side of the fluid coupling immediately before the start of the
feedback control,
          wherein the initial value is corrected in accordance with the calculated difference in
output-side rotational speed, and
          wherein the corrected initial value of the second hydraulic pressure ~~is greater in an
area where~~ decreases with an increase the calculated difference in output-side rotational
speed ~~is smaller than in an area where the calculated difference is greater.~~

17.   (Currently Amended): The method as claimed in ~~claim 15,~~ claim 16, wherein the <u>corrected</u> initial value of the second hydraulic pressure is held substantially constant in an area where the calculated difference in output-side rotational speed is smaller than a predetermined value, whereas the <u>corrected</u> initial value is decreased with increasing the calculated difference in an area where the calculated difference is greater than the predetermined value.

18.   (Currently Amended): The method as claimed in ~~claim 15,~~ claim 16, wherein there is provided a map set previously for correction of the initial value of the second hydraulic pressure.